To: Albright, David[Albright.David@epa.gov]

Cc: Johnson, AudreyL[Johnson.AudreyL@epa.gov]

From: Rumrill, Nancy

Sent: Tue 9/26/2017 7:41:45 PM

Subject: Excelsior Update FW: Proposed Agenda for today's call

Hi David,

Yesterday, we discussed the Southern boundary issue again with Excelsior, and they agreed to enhanced monitoring highlighted below in option 1. They would not be required to show a inward gradient on the southern boundary for the 1st year, but would have additional monitoring requirements triggering increased pumping in the well field and/or at active HC wells on the east side of the wellfield.

Ex. 5 - Deliberative Process

Thanks, Nancy
~~~~
United States Environmental Protection Agency
Nancy Rumrill (rumrill.nancy@epa.gov)
Drinking Water Protection Section (WTR-3-2)
US EPA, Region IX
75 Hawthorne St.
San Francisco, CA 94105
Phone (415) 972-3293

From: Rumrill, Nancy

Sent: Monday, September 25, 2017 2:21 PM

To: 'stwyerould@excelsiormining.com' <stwyerould@excelsiormining.com>; 'Rebecca Sawyer'

<rsawyer@excelsiormining.com>

Cc: 'Alison Jones' <ajones@clearcreekassociates.com>; Johnson, AudreyL

<Johnson.AudreyL@epa.gov>; 'JAMES D WALKER' <jameswalker5@msn.com>

Subject: Proposed Agenda for today's call

Hi Stephen and Becky,

Please see the following Agenda to help us with our discussion.

Thanks, Nancy

## Proposed Agenda

Discuss containment along the southern boundary -

- Option 1
- 1. Adopt plan for three inactive HC wells at the southern boundary with additional monitoring in the first year.
- 2. Monthly monitoring (sampling) for specific conductance (SC) and Level 1 indicator parameters for the first year in HC wells.
- 3. Early warning monitoring of SC and water levels at the outer IMWs triggering contingency actions (i.e., increase extraction rates at mine block and/or at HC wells to the east, or activate more HC wells to the east).
- Option 2
- 1. Require inward gradient between three HC wells and designated IMWs at the southern boundary.
- 2. Maintain hydraulic control in the first year with the existing eastern HC wells and/or over extraction in the active mine blocks.
- 3. Contingency actions required if inward gradient below 0.01 ft/ft or SC alert level exceeded.

- 4. Groundwater sampling in southern HC wells would be quarterly.
- Option 3
- 1. Install and activate three OW pairs along the southern boundary to monitor inward gradient and SC in outer OWs.
- 2. Maintain hydraulic control in the first year with the existing eastern HC wells and/or over extraction in the active mine blocks.
- 3. Contingency actions required if inward gradient below 0.01 ft/ft or SC alert level exceeded in the outer OWs.
- 4. Groundwater sampling in the southern outer OWs would be quarterly.

Discuss	containment	along the	eastern	wellfield	boundary.	if we	have time	during	this -	call.

Any other items.

United States Environmental Protection Agency

Nancy Rumrill (rumrill.nancy@epa.gov)

Drinking Water Protection Section (WTR-3-2)

US EPA, Region IX

75 Hawthorne St.

San Francisco, CA 94105

Phone (415) 972-3293